FARMINGTON NM	
Latitude = 36.75 N	WMO No. 723658
Longitude =108.20 W	Elevation = 5502 feet
Period of Record = 1973 to 1996	Average Pressure = 24.55 inches Hg

Design Criteria Data

		Mean Coincident (Average) Values			
Dry Bulb Temperature (T)	**Design Value (^oF)**	Wet Bulb Temperature (^oF)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	98	61	39	12.0	W
0.4% Occurrence	95	61	43	11.1	W
1.0% Occurrence	92	61	46	10.6	WSW
2.0% Occurrence	90	60	47	10.2	WSW
Mean Daily Range	26	-	-	-	-
97.5% Occurrence	16	15	13	5.8	E
99.0% Occurrence	10	10	10	5.7	E
99.6% Occurrence	5	5	8	5.4	E
Median of Extreme Lows	0	0	6	6.5	E
		Mean Coincident (Average) Values			
Wet Bulb Temperature (T_{wb})	**Design Value (^oF)**	Dry Bulb Temperature (^oF)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	68	83	95	8.1	WSW
0.4% Occurrence	65	83	80	7.9	WSW
1.0% Occurrence	64	82	76	8.0	WSW
2.0% Occurrence	63	81	73	8.1	E
		Mean Coincident (Average) Values			
Humidity Ratio (HR)	**Design Value (gr/lb)**	Dry Bulb Temperature (^oF)	Vapor Pressure (in. Hg)	Wind Speed (mph)	Prevailing Direction (NSEW)
Median of Extreme Highs	104	71	0.58	7.5	ENE
0.4% Occurrence	95	68	0.52	5.9	E
1.0% Occurrence	88	68	0.49	6.7	E
2.0% Occurrence	84	69	0.47	7.0	E
Air Conditioning/		$T \geq 93^oF$	$T \geq 80^oF$	$T_{wb} \geq 73^oF$	$T_{wb} \geq 67^oF$
Humid Area Criteria	# of Hours	72	784	0	10

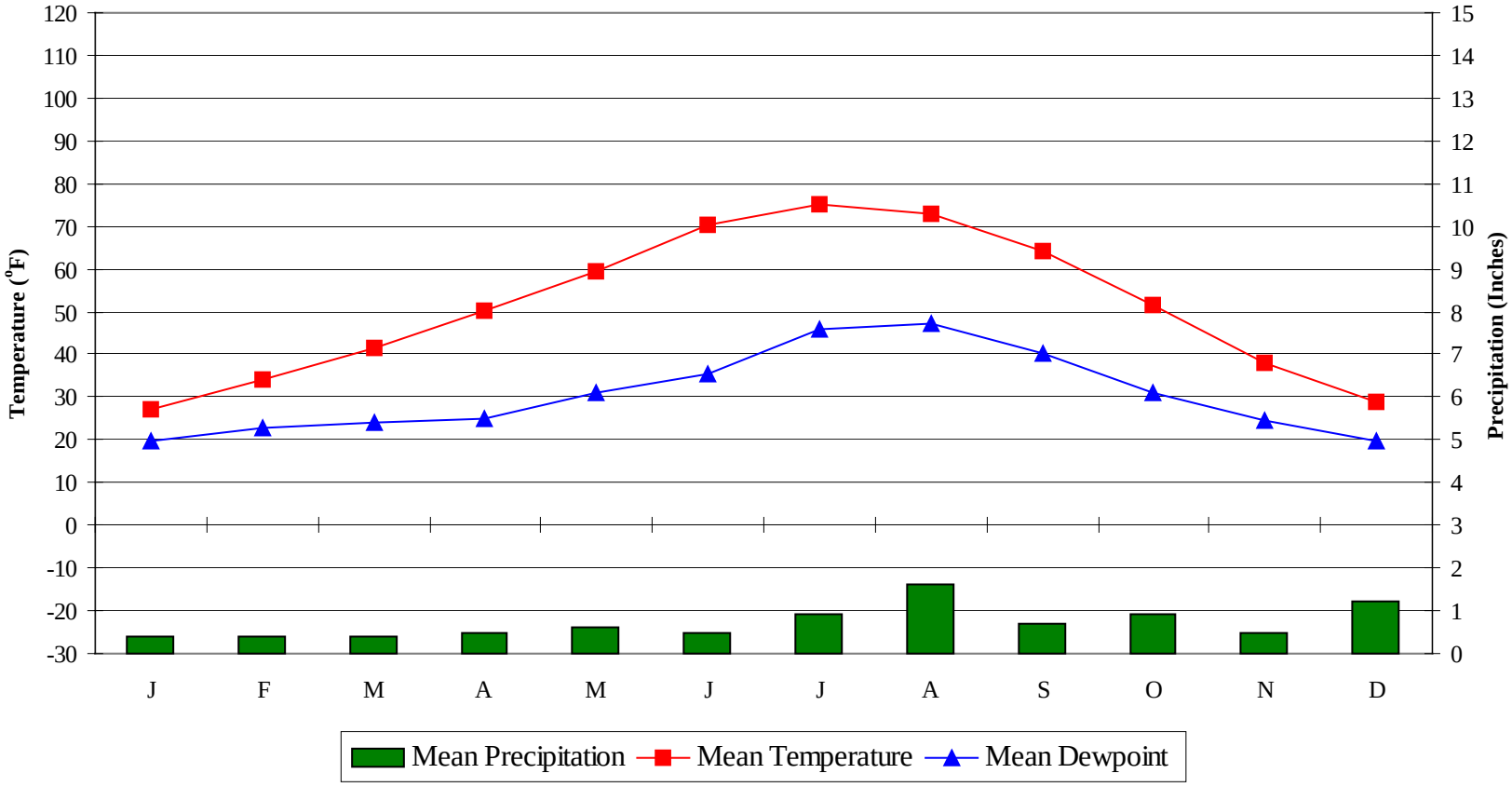
Other Site Data

Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75^oF-RH 60% Latent + Sensible
6	2.0	90	0.0 + 0.8
Ground Water Temperature (^oF) 50 Foot Depth *	**Frost Depth 50 Year Recurrence (in.)**	**Ground Snow Load 50 Year Recurrence (lb/ft^2)**	**Average Annual Freeze-Thaw Cycles (#)**
53.8	N/A	N/A	111

*Note: Temperatures at greater depths can be estimated by adding 1.5^oF per 100 feet additional depth.

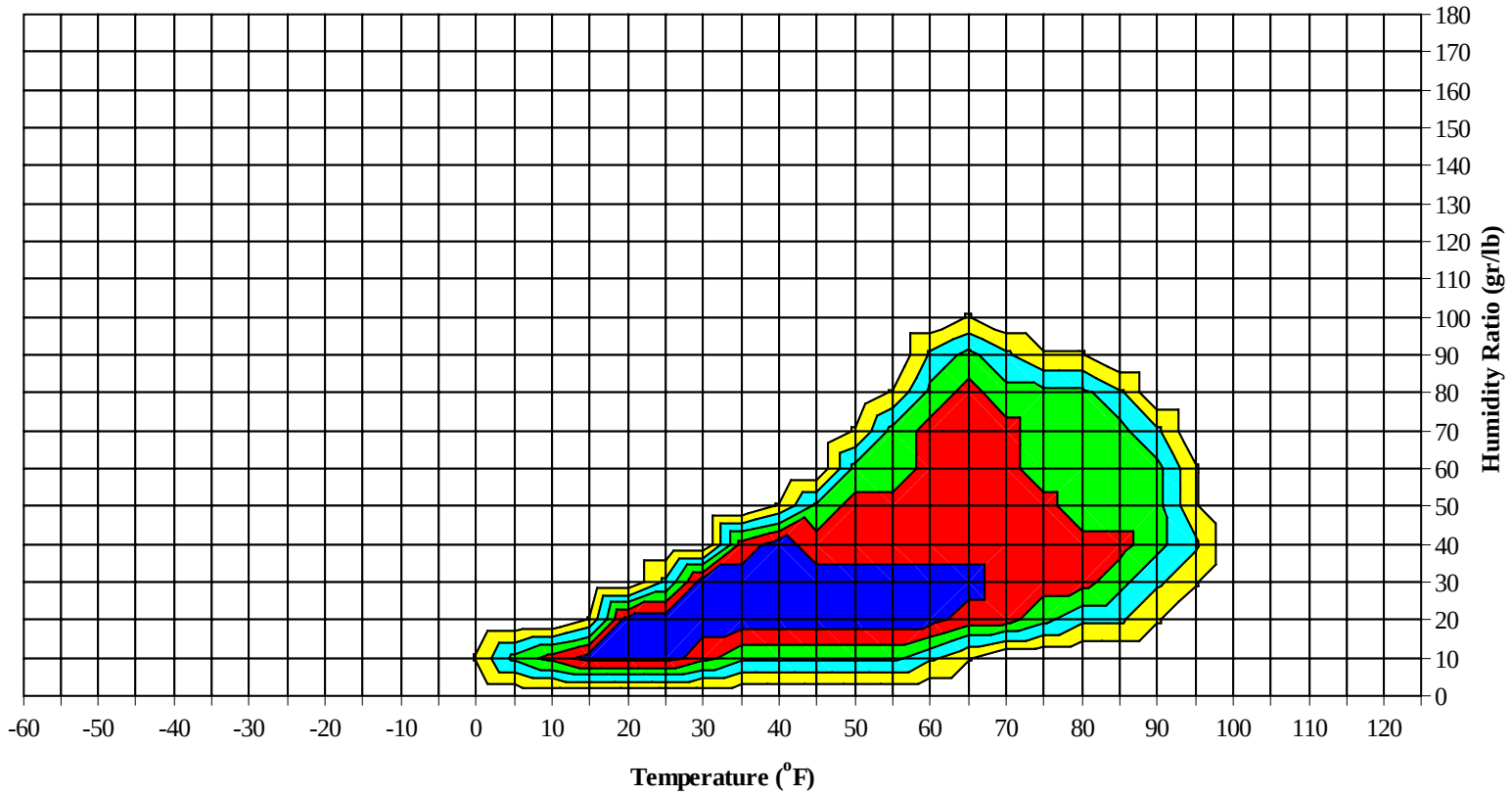
FARMINGTON NM WMO No. 723658

Average Annual Climate



FARMINGTON NM WMO No. 723658

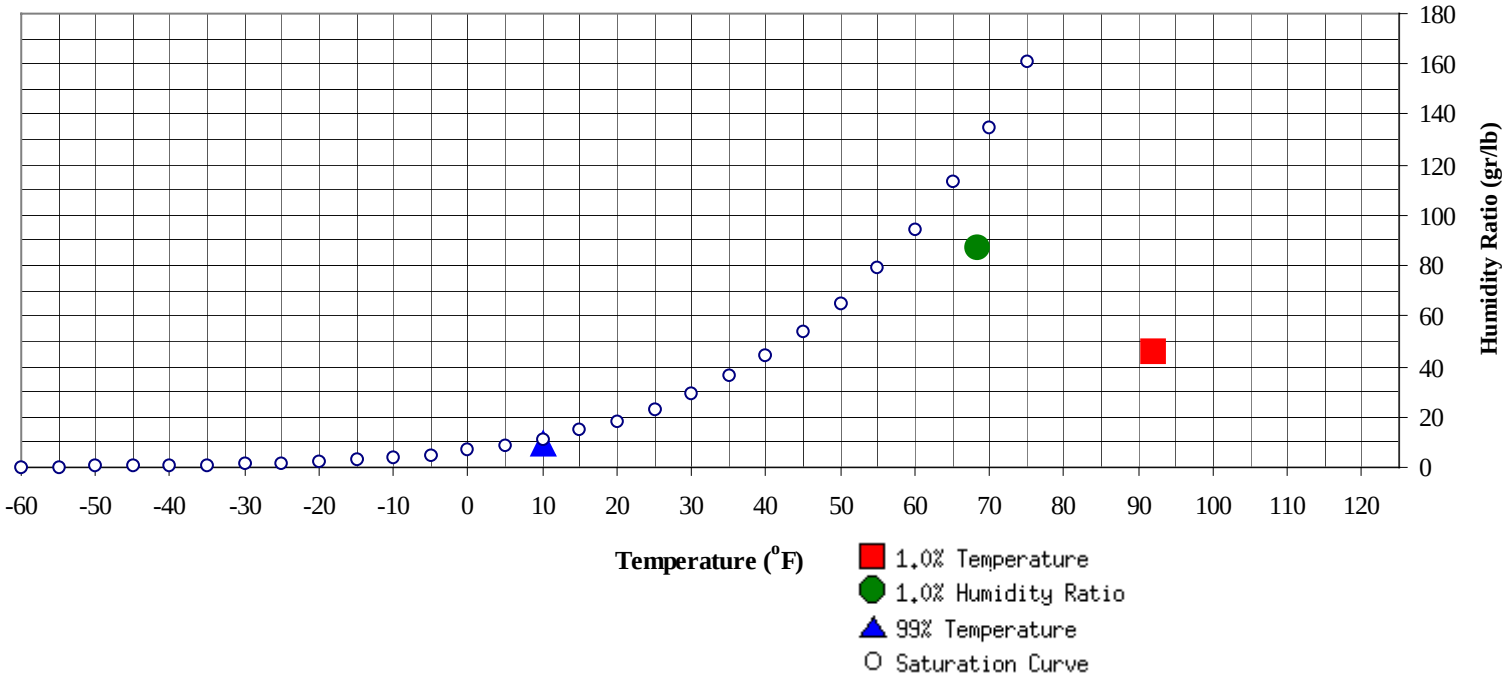
Long Term Psychrometric Summary



- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

FARMINGTON NM WMO No. 723658

Psychrometric Summary of Peak Design Values



	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)
99% Dry Bulb	10	9.6	3.9

		MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
1.0% Humidity Ratio	(gr/lb)				
	87.5	68.3	61.4	57.9	30.0

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	92	46.2	60.7	29.4

FARMINGTON NM WMO No. 723658

Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	January Hour Group (LST) 01 To 08	January 09 To 16	January 17 To 00	January Total Obs	January MCWB (°F)	February Hour Group (LST) 01 To 08	February 09 To 16	February 17 To 00	February Total Obs	February MCWB (°F)	March Hour Group (LST) 01 To 08	March 09 To 16	March 17 To 00	March Total Obs	March MCWB (°F)
105 / 109															
100 / 104															
95 / 99															
90 / 94															
85 / 89															
80 / 84															
75 / 79												0	0	1	53.4
70 / 74							0		0	55.5		3	1	3	51.4
65 / 69		0		0	44.0		1	0	2	47.1		11	4	15	47.3
60 / 64		0	0	1	44.1		5	1	6	44.5	0	23	10	33	44.4
55 / 59		2	0	2	41.1		14	5	19	42.1	0	31	19	50	41.9
50 / 54		8	2	10	39.2	0	22	11	33	39.8	3	43	32	78	39.7
45 / 49	0	18	7	24	36.8	2	31	21	54	37.5	11	43	44	98	37.6
40 / 44	1	29	14	44	34.5	6	38	34	79	35.1	28	43	50	121	35.1
35 / 39	9	42	32	82	32.2	22	41	44	107	32.3	57	31	46	134	32.3
30 / 34	32	53	58	143	29.1	51	38	53	142	29.1	74	17	32	123	28.9
25 / 29	49	43	57	148	25.0	65	21	31	117	25.1	46	3	9	59	24.6
20 / 24	57	27	37	121	20.8	46	7	13	66	20.7	19	1	2	23	19.9
15 / 19	43	16	20	79	16.3	17	4	4	25	16.1	6	0	0	7	16.0
10 / 14	28	6	12	47	11.6	5	2	2	9	11.4	1	0	0	1	11.4
5 / 9	17	3	6	25	6.9	5	1	1	6	6.7	0			0	9.0
0 / 4	9	1	2	11	2.2	3	0	1	4	2.1					
-5 / -1	3	0	0	3	-2.2	1	0	0	1	-2.2					
-10 / -6	1	0	0	1	-6.8	0		0	0	-7.0					
-15 / -11	0			0	-10.4	0		0	0	-10.3					
-20 / -16															

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

FARMINGTON NM WMO No. 723658

Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	April Hour Group (LST) 01 To 08	April 09 To 16	April 17 To 00	April Total Obs	April MCWB (°F)	May Hour Group (LST) 01 To 08	May 09 To 16	May 17 To 00	May Total Obs	May MCWB (°F)	June Hour Group (LST) 01 To 08	June 09 To 16	June 17 To 00	June Total Obs	June MCWB (°F)
105 / 109													0	0	
100 / 104												0	0	1	59.4
95 / 99												6	3	9	59.5
90 / 94							1	0	1	58.8		23	12	35	58.6
85 / 89		0	0	0	54.8		6	3	9	56.1	0	42	24	66	56.9
80 / 84		3	1	3	52.7		20	9	29	53.7	0	50	31	80	55.5
75 / 79		10	4	14	50.7		38	19	57	52.1	2	43	36	82	54.1
70 / 74		27	12	39	49.0	0	48	29	77	50.5	12	35	41	88	52.7
65 / 69	0	36	22	58	46.7	3	46	38	87	48.8	35	20	40	95	51.3
60 / 64	1	41	30	72	44.5	15	40	44	100	46.8	62	10	27	100	49.2
55 / 59	8	35	38	81	42.4	38	23	44	105	45.1	63	4	14	81	46.1
50 / 54	22	30	36	88	40.2	67	13	30	110	42.7	48	1	6	55	42.6
45 / 49	41	25	35	102	37.8	64	7	17	89	39.7	20	0	2	22	39.5
40 / 44	52	21	31	103	34.8	40	3	9	52	36.4	6		0	6	35.9
35 / 39	58	10	18	86	32.0	18	1	2	21	32.6	1			1	31.6
30 / 34	39	3	11	52	28.4	5	0	1	6	29.4					
25 / 29	15	1	2	18	24.6	1			1	24.5					
20 / 24	3			3	20.1	0			0	20.3					
15 / 19	0			0	17.0										
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

FARMINGTON NM WMO No. 723658

Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)

Period of Record = 1973 to 1996

	July					August					September				
Temperature Range (°F)	Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)	Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)	Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)
105 / 109							0		0	66.5					
100 / 104		0	0	0	61.7		0	0	0	64.9					
95 / 99		12	5	17	61.2		5	2	6	62.6		0	0	0	63.0
90 / 94		44	20	64	60.9		26	10	37	61.8		4	1	6	61.2
85 / 89	0	57	33	91	60.3	0	52	24	76	60.9		16	5	21	58.7
80 / 84	0	57	39	96	59.6	0	62	39	101	59.8		38	15	53	57.2
75 / 79	6	42	48	96	58.7	3	47	47	98	58.9	0	50	28	78	55.9
70 / 74	37	24	50	112	57.4	23	34	56	112	57.8	2	44	39	85	54.3
65 / 69	83	7	35	125	55.9	69	16	40	125	56.6	12	35	45	92	52.8
60 / 64	89	2	14	105	54.0	97	6	23	126	54.6	42	26	49	117	51.4
55 / 59	29	0	2	31	48.9	44	1	5	50	50.6	67	15	33	115	49.1
50 / 54	6		0	6	43.3	11	0	0	11	45.0	63	8	17	88	45.8
45 / 49	0			0	42.1	2			2	40.6	36	2	6	43	41.3
40 / 44						0			0	39.0	15	0	1	17	37.0
35 / 39											4	0	0	4	32.8
30 / 34											1			1	28.7
25 / 29											0			0	25.0
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

FARMINGTON NM WMO No. 723658

Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)

Period of Record = 1973 to 1996

	October					November					December				
	Hour Group (LST)				MCWB	Hour Group (LST)				MCWB	Hour Group (LST)				MCWB
Temperature Range (°F)	01 To 08	09 To 16	17 To 00	Total Obs	(°F)	01 To 08	09 To 16	17 To 00	Total Obs	(°F)	01 To 08	09 To 16	17 To 00	Total Obs	(°F)
105 / 109															
100 / 104															
95 / 99															
90 / 94															
85 / 89		0	0	0	54.3										
80 / 84		6	1	7	53.7										
75 / 79		15	4	19	52.3		0		0						
70 / 74		33	10	43	50.6		1	0	1	49.7					
65 / 69		38	19	57	49.0		7	1	7	47.9					
60 / 64	1	43	32	76	47.2		16	4	20	45.3		1		1	43.8
55 / 59	8	35	44	87	45.1	0	24	10	35	42.9		4	0	4	42.4
50 / 54	29	32	47	108	43.2	2	32	20	53	40.6		12	2	14	39.5
45 / 49	58	22	42	122	40.1	10	38	31	79	38.9	0	25	7	33	37.0
40 / 44	67	14	27	108	36.5	20	38	44	102	35.9	3	41	22	66	34.7
35 / 39	48	7	14	68	32.9	36	37	49	122	32.4	17	48	41	105	32.0
30 / 34	27	2	6	35	29.2	66	26	44	137	28.8	34	49	57	140	28.7
25 / 29	9	0	2	11	24.8	55	12	26	94	24.8	56	34	55	145	24.7
20 / 24	2	0		3	21.3	32	4	9	45	20.5	54	20	33	108	20.4
15 / 19	0			0	16.6	13	1	2	17	15.8	40	10	17	67	16.0
10 / 14						4	0	1	5	11.3	26	3	6	36	11.7
5 / 9						1	0	0	1	5.0	11	2	3	15	7.1
0 / 4						1	0	0	1	1.5	2	1	2	5	2.3
-5 / -1						0			0	-1.8	1	0	1	2	-2.5
-10 / -6											2	0	1	3	-6.5
-15 / -11											1	0	0	1	-12.1
-20 / -16											0			0	

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

FARMINGTON NM WMO No. 723658

Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)

Period of Record = 1973 to 1996

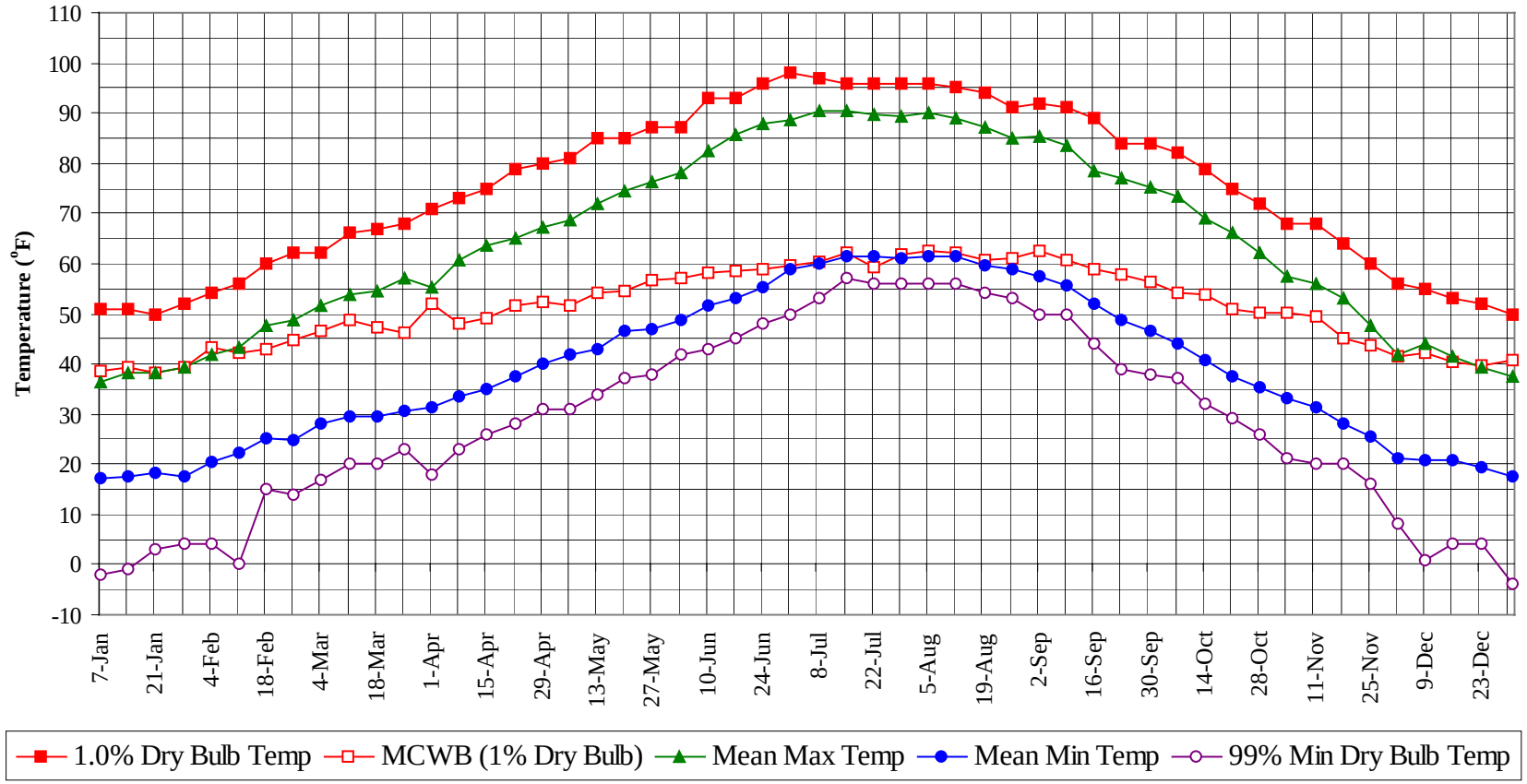
Annual Totals

Temperature Range (°F)	Hour Group (LST) 01 To 08	09 To 16	17 To 00	Total Obs	MCWB (°F)
105 / 109		0	0	0	66.5
100 / 104		1	0	2	61.9
95 / 99		23	10	33	61.0
90 / 94		99	44	143	60.6
85 / 89	0	175	90	265	59.4
80 / 84	1	235	134	370	57.9
75 / 79	11	246	188	446	56.1
70 / 74	75	249	239	563	54.3
65 / 69	203	217	244	664	52.4
60 / 64	309	213	235	757	49.8
55 / 59	257	187	215	659	45.7
50 / 54	250	201	204	655	42.1
45 / 49	245	211	212	669	38.8
40 / 44	239	226	232	698	35.5
35 / 39	269	214	247	730	32.3
30 / 34	328	186	262	776	28.9
25 / 29	296	114	180	590	24.9
20 / 24	214	59	95	368	20.6
15 / 19	119	31	44	194	16.1
10 / 14	64	12	21	97	11.6
5 / 9	33	5	9	48	6.9
0 / 4	14	2	4	21	2.2
-5 / -1	5	1	1	7	-2.3
-10 / -6	3	0	1	4	-6.8
-15 / -11	1	0	0	1	-11.3
-20 / -16	0			0	

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

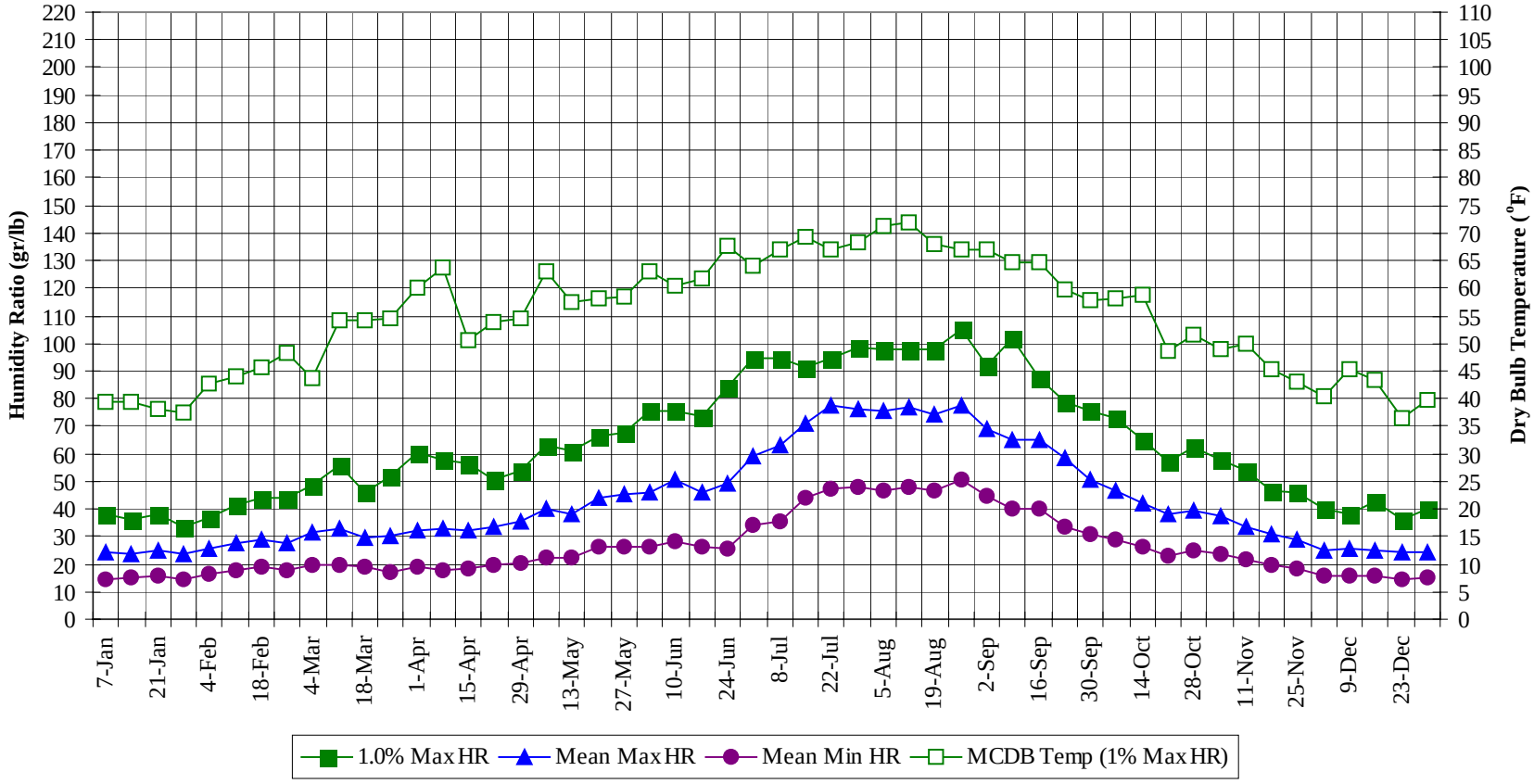
FARMINGTON NM WMO No. 723658

Annual Summary of Temperatures



FARMINGTON NM WMO No. 723658

Long Term Humidity and Dry Bulb Temperature Summary



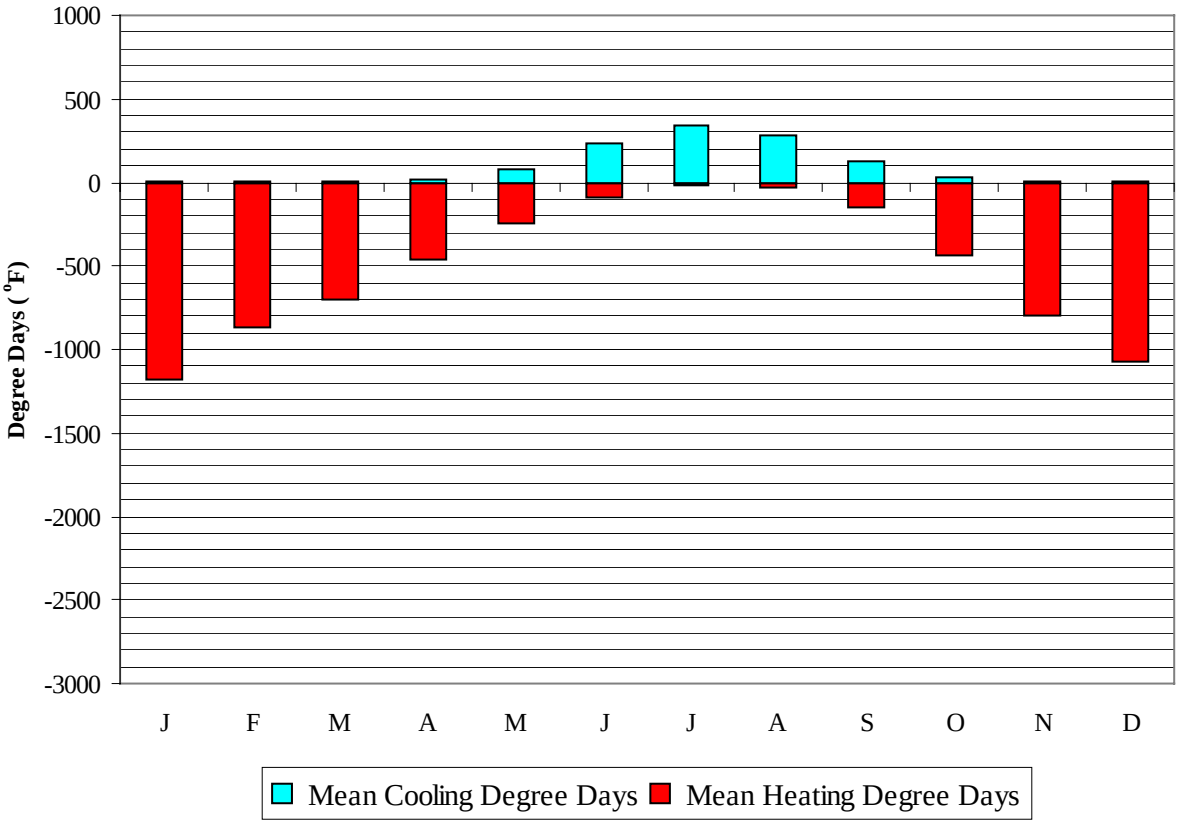
FARMINGTON NM WMO No. 723658

Long Term Dry Bulb Temperature and Humidity Summary

Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	51.0	38.6	36.6	17.1	-2.0	37.8	39.2	24.3	14.6
14-Jan	51.0	39.2	38.3	17.7	-1.0	36.4	39.3	23.5	15.0
21-Jan	50.0	38.3	38.3	18.3	3.0	37.8	38.0	25.1	15.9
28-Jan	52.0	39.3	39.1	17.7	4.0	33.6	37.5	23.8	14.4
4-Feb	54.0	43.4	41.8	20.5	4.0	37.1	42.9	25.7	16.7
11-Feb	56.0	42.1	43.4	22.1	0.0	41.3	44.0	27.6	17.6
18-Feb	60.0	42.8	47.5	25.3	15.0	44.1	45.5	28.8	19.1
25-Feb	62.0	44.6	48.7	25.0	14.0	44.1	48.2	27.4	17.4
4-Mar	62.0	46.4	51.7	28.2	17.0	48.3	43.6	31.7	19.9
11-Mar	66.0	48.8	54.0	29.4	20.0	56.0	54.3	32.7	20.0
18-Mar	67.0	47.1	54.4	29.4	20.0	46.2	54.2	29.5	18.8
25-Mar	68.0	46.4	57.2	30.6	23.0	51.8	54.5	30.4	17.3
1-Apr	71.0	51.9	55.4	31.3	18.0	60.2	60.2	32.3	19.3
8-Apr	73.0	48.1	60.6	33.5	23.0	58.1	63.8	32.5	17.9
15-Apr	75.0	49.3	63.5	35.1	26.0	56.7	50.7	32.0	18.1
22-Apr	79.0	51.7	65.1	37.5	28.0	50.4	53.9	33.5	19.5
29-Apr	80.0	52.5	67.4	40.1	31.0	53.9	54.5	35.3	20.3
6-May	81.0	51.7	68.8	41.8	31.0	63.0	63.1	40.3	22.5
13-May	85.0	54.2	72.0	42.8	34.0	60.9	57.5	38.0	22.1
20-May	85.0	54.7	74.5	46.5	37.0	66.5	58.1	44.0	26.5
27-May	87.0	56.9	76.4	46.8	38.0	67.9	58.4	45.6	26.0
3-Jun	87.0	57.0	78.0	48.7	42.0	75.6	63.0	46.0	26.6
10-Jun	93.0	58.1	82.6	51.6	43.0	75.6	60.3	50.3	27.9
17-Jun	93.0	58.6	85.6	53.1	45.0	73.5	61.6	46.3	26.1
24-Jun	96.0	59.1	88.0	55.2	48.0	84.0	67.6	49.2	25.9
1-Jul	98.0	59.7	88.7	58.9	50.0	94.5	64.0	58.9	34.3
8-Jul	97.0	60.4	90.3	60.0	53.0	94.5	66.9	63.4	35.4
15-Jul	96.0	62.2	90.5	61.5	57.0	91.0	69.3	70.9	43.7
22-Jul	96.0	59.1	89.6	61.6	56.0	94.5	67.1	77.2	47.2
29-Jul	96.0	61.9	89.2	61.1	56.0	98.7	68.3	76.0	47.7
5-Aug	96.0	62.5	90.1	61.6	56.0	98.0	71.2	75.3	46.6
12-Aug	95.0	62.3	89.1	61.4	56.0	98.0	71.9	76.5	48.2
19-Aug	94.0	60.8	87.2	59.5	54.0	98.0	68.1	74.3	46.4
26-Aug	91.0	61.1	84.8	58.7	53.0	105.0	67.1	77.6	50.4
2-Sep	92.0	62.5	85.5	57.6	50.0	91.7	67.1	69.2	44.6
9-Sep	91.0	60.8	83.7	55.5	50.0	101.5	64.8	65.1	40.3
16-Sep	89.0	59.0	78.4	52.1	44.0	87.5	64.8	64.9	40.2
23-Sep	84.0	57.9	77.1	48.8	39.0	79.1	59.8	58.1	33.8
30-Sep	84.0	56.3	75.2	46.6	38.0	75.6	57.7	50.8	30.6
7-Oct	82.0	54.1	73.3	43.9	37.0	72.8	58.2	46.4	29.1
14-Oct	79.0	53.9	69.1	40.8	32.0	65.1	58.8	42.0	26.1
21-Oct	75.0	51.0	66.1	37.6	29.0	57.4	48.5	38.0	23.3
28-Oct	72.0	50.1	62.0	35.3	26.0	62.3	51.6	39.2	25.2
4-Nov	68.0	50.2	57.6	33.0	21.0	58.1	48.9	37.2	23.5
11-Nov	68.0	49.4	55.9	31.3	20.0	53.9	49.9	33.8	21.7
18-Nov	64.0	45.0	52.9	28.2	20.0	46.9	45.4	30.6	20.0
25-Nov	60.0	43.6	47.6	25.5	16.0	46.2	42.9	28.7	18.3
2-Dec	56.0	41.4	42.0	21.1	8.0	39.9	40.5	25.0	15.7
9-Dec	55.0	42.1	44.1	21.0	1.0	37.8	45.3	25.5	15.9
16-Dec	53.0	40.4	41.4	20.7	4.0	42.7	43.3	25.2	15.7
23-Dec	52.0	39.6	39.1	19.3	4.0	36.4	36.6	24.2	14.7
31-Dec	50.0	40.8	37.4	17.7	-4.0	39.9	39.6	24.5	14.9

FARMINGTON NM WMO No. 723658

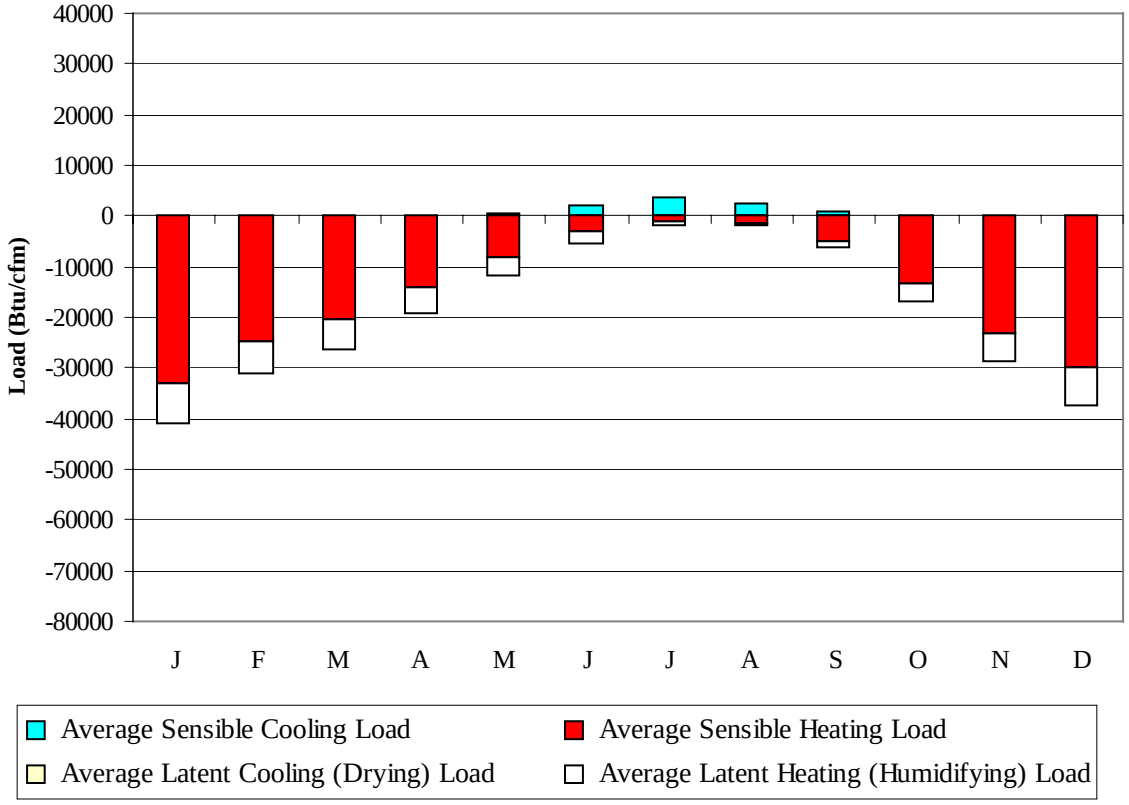
Degree Days, Heating and Cooling
(Base 65°F)



	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1176
FEB	0	871
MAR	2	696
APR	23	458
MAY	80	250
JUN	234	86
JUL	336	23
AUG	280	34
SEP	128	145
OCT	29	434
NOV	1	801
DEC	0	1070
ANN	1112	6044

FARMINGTON NM WMO No. 723658

Average Ventilation and Infiltration Loads
(Outside Air vs. 75°F, 60% RH summer; 68°F, 30% RH winter)



	Average Sensible Cooling Load (Btu/cfm)	Average Sensible Heating Load (Btu/cfm)	Average Latent Cooling Load (Btu/cfm)	Average Latent Heating Load (Btu/cfm)
JAN	0	-32895	0	-8000
FEB	0	-24764	0	-6361
MAR	0	-20315	3	-6005
APR	47	-13974	0	-5320
MAY	409	-8213	0	-3425
JUN	2282	-3167	0	-2215
JUL	3533	-1183	22	-514
AUG	2578	-1593	51	-344
SEP	845	-5103	14	-1111
OCT	80	-13342	0	-3590
NOV	0	-23058	0	-5624
DEC	0	-30041	0	-7438
ANN	9774	-177648	90	-49947

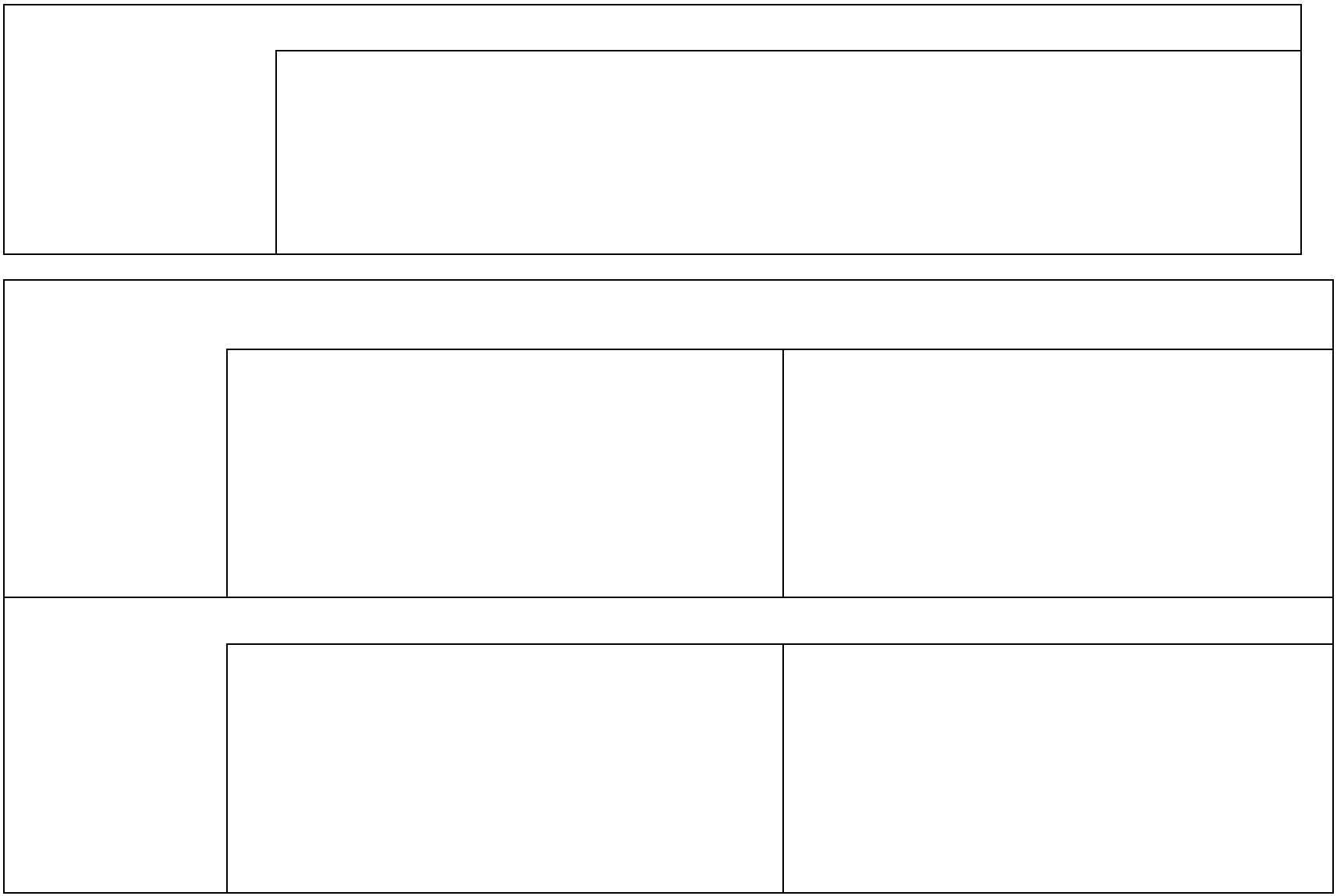
Average Annual Solar Radiation – Nearest Available Site

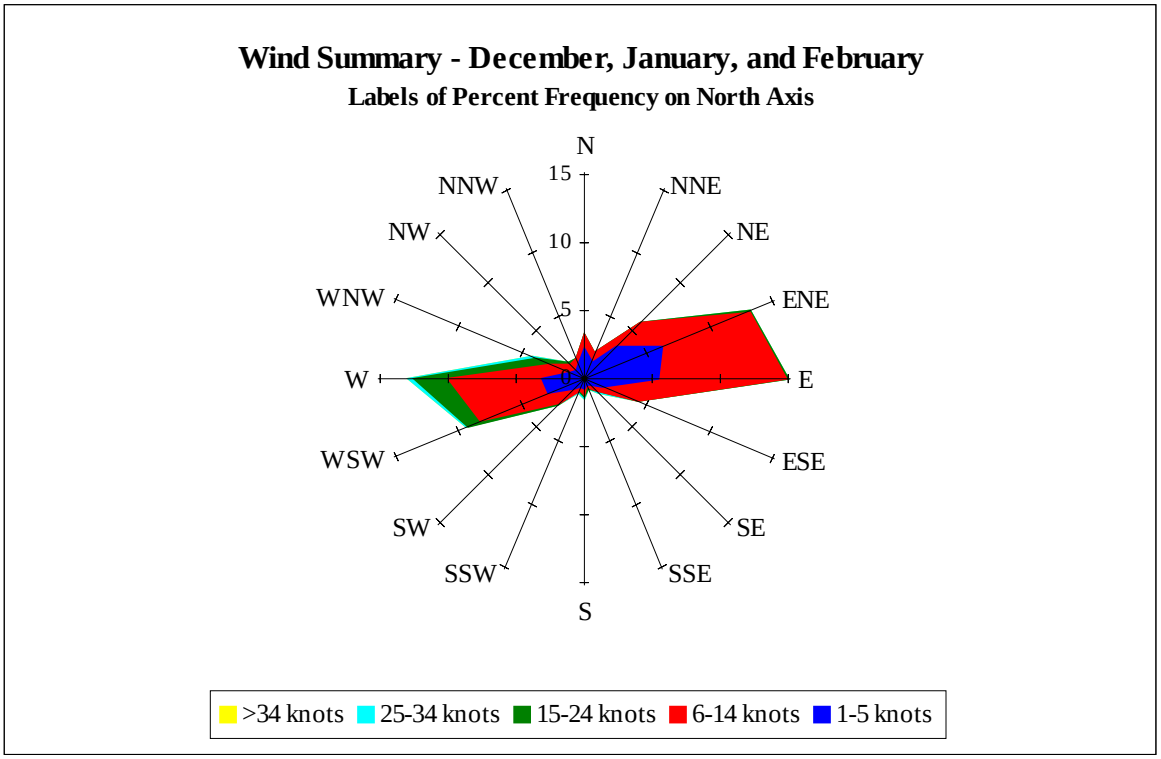
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

No Solar Radiation
Data Available

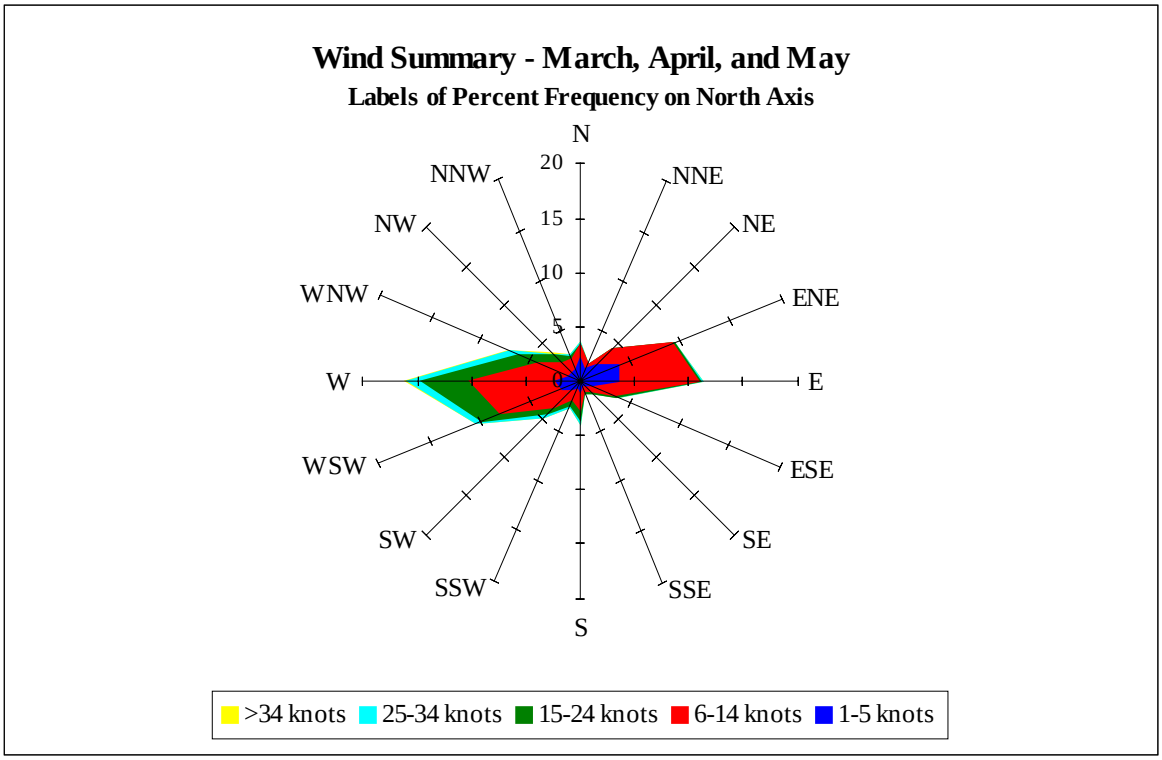
Average Annual Solar Heat and Illumination – Nearest Available Site

(Source: National Renewable Energy Laboratory, Golden CO, 1995)

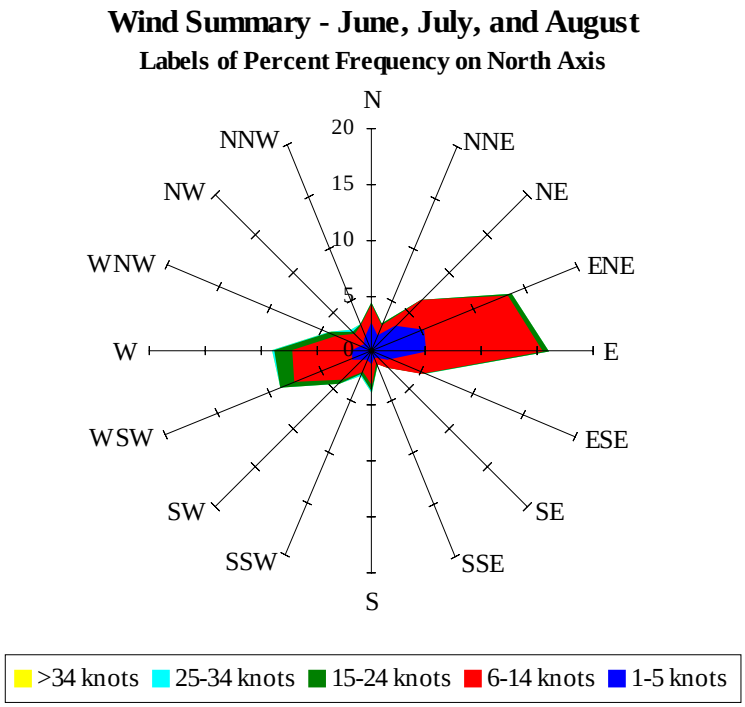




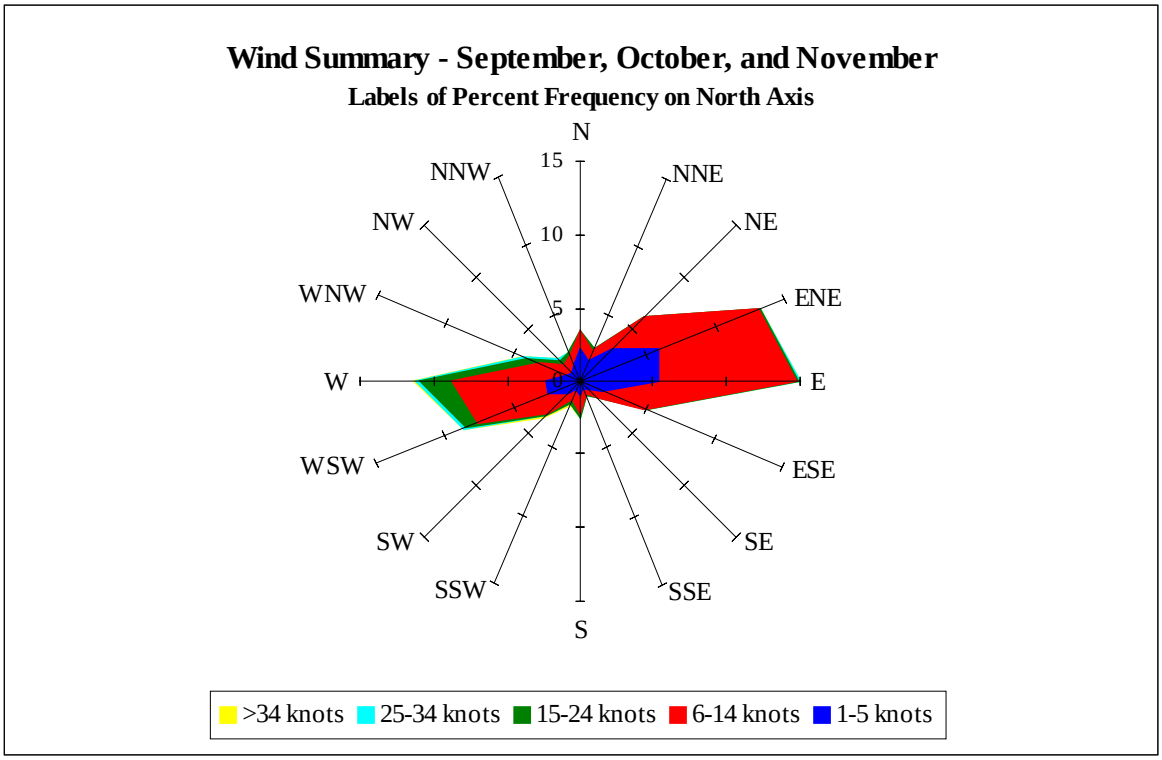
Percent Calm = 19.87



Percent Calm = 12.98



Percent Calm = 12.13



Percent Calm = 16.57